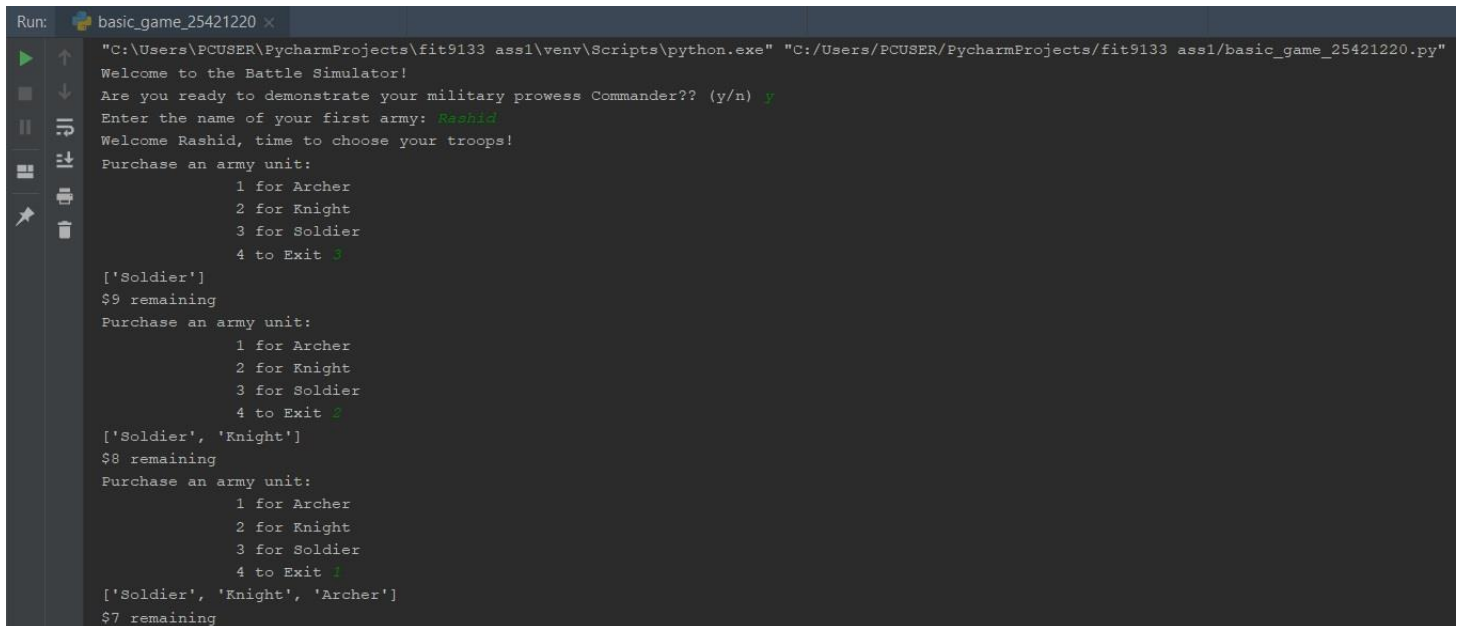


FIT9133 Assignment 1

Basic Game



```
Run: basic_game_25421220 x
"C:\Users\PCUSER\PycharmProjects\fit9133 ass1\venv\Scripts\python.exe" "C:/Users/PCUSER/PycharmProjects/fit9133 ass1/basic_game_25421220.py"
Welcome to the Battle Simulator!
Are you ready to demonstrate your military prowess Commander?? (y/n) y
Enter the name of your first army: Rashid
Welcome Rashid, time to choose your troops!
Purchase an army unit:
    1 for Archer
    2 for Knight
    3 for Soldier
    4 to Exit 3
['Soldier']
$9 remaining
Purchase an army unit:
    1 for Archer
    2 for Knight
    3 for Soldier
    4 to Exit 2
['Soldier', 'Knight']
$8 remaining
Purchase an army unit:
    1 for Archer
    2 for Knight
    3 for Soldier
    4 to Exit 1
['Soldier', 'Knight', 'Archer']
$7 remaining
```

The basic game for the simulator is the basis for what's to come in the extended game. This will be clearer when we explore the different aspects of the extended game.

As appears in the image above, the simulator begins by welcoming the player. In this case, since it is only a one player version, the user will have to choose both armies that will then duel in the simulator.

After being prompted as to whether you want to play, if you enter y, you will proceed to name your army and choose your units for the first army. To choose your army wisely, there are a few things you should know.

You only have \$10 to pick your army units with each unit being priced at \$1 each. Whatever your pick is, you cannot go back to add to your army. Once you press exit, your army is final. The format that follows a selection is as shown on the above figure.

Rashid Elhawli
ID: 25421220

```
Purchase an army unit:
    1 for Archer
    2 for Knight
    3 for Soldier
    4 to Exit 4

Your army is made up of ['Soldier', 'Knight', 'Archer'] and you have $ 7 remaining
Enter the name of your second army: Elhawli
Welcome Elhawli, time to choose your troops!
Purchase an army unit:
    1 for Archer
    2 for Knight
    3 for Soldier
    4 to Exit 3

['Soldier']
$9 remaining
Purchase an army unit:
    1 for Archer
    2 for Knight
    3 for Soldier
    4 to Exit 3

['Soldier', 'Soldier']
$8 remaining
Purchase an army unit:
    1 for Archer
    2 for Knight
    3 for Soldier
    4 to Exit 2

['Soldier', 'Soldier', 'Knight']
$7 remaining
```

The output continues to show what happens when you finally exit the selection process. Your final army roster is presented as well as the amount left from the initial \$10. The process then takes you to choose your second army, much like you did with the first army.

```
Purchase an army unit:
    1 for Archer
    2 for Knight
    3 for Soldier
    4 to Exit 4

Your army is made up of ['Soldier', 'Soldier', 'Knight', 'Archer', 'Knight'] and you have $ 5 remaining

The first army consists of: ['Soldier', 'Knight', 'Archer']
The second army consists of: ['Soldier', 'Soldier', 'Knight', 'Archer', 'Knight']

The army with units remaining at the end of battle, wins.
```

Once you've finished picking the second army, your final choices will come up like before. But then, both armies will be displayed before they do battle.

```
Soldier & Soldier
It's a tie!

Army 1:  ['Knight', 'Archer']
Army 2:  ['Soldier', 'Knight', 'Archer', 'Knight']
Knight & Soldier
The soldier is victorious!

Army 1:  ['Archer']
Army 2:  ['Soldier', 'Knight', 'Archer', 'Knight']
Archer & Soldier
The archer is victorious!

Army 1:  ['Archer']
Army 2:  ['Knight', 'Archer', 'Knight']
Archer & Knight
The knight is victorious!

Army 1:  []
Army 2:  ['Knight', 'Archer', 'Knight']
ELHAWLI (Army 2) IS VICTORIOUS!

Remaining units of Army 2:  ['Knight', 'Archer', 'Knight']

Thank you for playing. If you really liked our simulator, you can always play again :)

Process finished with exit code 0
```

This figure shows all the encounters between the two lists, which are automatically generated. The user has no more input in this section. Once one of the armies has no units left, the winner will be announced as the army with units remaining. The remaining units are also listed, with a brief thank you note for your cooperation.

Rashid Elhawli
ID: 25421220

Extended Game

```
Run: extended_game_25421220 x
"C:\Users\PCUSER\PycharmProjects\fit9133 ass1\venv\Scripts\python.exe" "C:/Users/PCUSER/PycharmProjects/fit9133 ass1/extended_game_25421220.py"
Welcome to the Battle Simulator!
Are you ready to demonstrate your military prowess Commander?? (y/n) y
Enter the name of your first army: Rashid
Welcome Rashid, time to choose your troops!
Purchase an army unit:
    1 for Archer
    2 for Knight
    3 for Soldier
    4 for Siege Equipment
    5 for Wizard
    6 to Exit 5
['Wizard']
$7 remaining
Purchase an army unit:
    1 for Archer
    2 for Knight
    3 for Soldier
    4 for Siege Equipment
    5 for Wizard
    6 to Exit 4
['Wizard', 'Siege Equipment']
```

The extended game is much like the basic game, but with some added features. My added game included Option 3-Medics and Option 4-Expanded armies.

This figure is much like that of the basic game welcoming, however not only do we have 2 extra units in the siege equipment and wizard, there is also the availability of medics with whatever money is left over from the initial \$10. The siege equipment is priced at \$2 since it is only defeated by the knight and wizard. While the wizard is priced at \$3 because only the arrow of the archer can get him.

It is also worth noting, that whenever one of your units dies, it is automatically recovered through use of one of the medics till they run out. Once they run out, the simulator continues as normal till one of the armies has no units left.

```
Purchase an army unit:
    1 for Archer
    2 for Knight
    3 for Soldier
    4 for Siege Equipment
    5 for Wizard
    6 to Exit 6
Your army is made up of ['Wizard', 'Siege Equipment', 'Knight', 'Soldier'] and you have $ 3 remaining
Enter the name of your second army: Elhawli
Welcome Elhawli, time to choose your troops!
Purchase an army unit:
    1 for Archer
    2 for Knight
    3 for Soldier
    4 for Siege Equipment
    5 for Wizard
    6 to Exit 3
['Soldier']
$9 remaining
Purchase an army unit:
    1 for Archer
    2 for Knight
    3 for Soldier
    4 for Siege Equipment
    5 for Wizard
    6 to Exit 1
['Soldier', 'Archer']
$8 remaining
```

Similar to the basic game, the options are presented so that you can continue to pick your second army.

Rashid Elhawli
ID: 25421220

```
Purchase an army unit:
    1 for Archer
    2 for Knight
    3 for Soldier
    4 for Siege Equipment
    5 for Wizard
    6 to Exit 6

Your army is made up of ['Soldier', 'Archer', 'Siege Equipment', 'Wizard'] and you have $ 3 remaining

Army 1 has 3 medics
['Medic', 'Medic', 'Medic']
Army 2 has 3 medics
['Medic', 'Medic', 'Medic']

The first army consists of: ['Wizard', 'Siege Equipment', 'Knight', 'Soldier'] and ['Medic', 'Medic', 'Medic']
The second army consists of: ['Soldier', 'Archer', 'Siege Equipment', 'Wizard'] and ['Medic', 'Medic', 'Medic']

The army with units remaining at the end of battle, wins.
```

After presenting units of the second army, the number of medics each army has accrued is also detailed. The complete armies are presented as a list of units for each army, as well as a separate list of the medics.

```
Battle lines have been drawn, it's now time to duel!

Wizard & Soldier
The wizard is victorious!

Army 1: ['Wizard', 'Siege Equipment', 'Knight', 'Soldier']
Army 2: ['Archer', 'Siege Equipment', 'Wizard', 'Soldier']
Wizard & Archer
The archer is victorious!

Army 1: ['Siege Equipment', 'Knight', 'Soldier', 'Wizard']
Army 2: ['Archer', 'Siege Equipment', 'Wizard', 'Soldier']
Siege Equipment & Archer
The siege equipment is victorious!

Army 1: ['Siege Equipment', 'Knight', 'Soldier', 'Wizard']
Army 2: ['Siege Equipment', 'Wizard', 'Soldier', 'Archer']
Siege Equipment & Siege Equipment
It's a tie!

Army 1: ['Knight', 'Soldier', 'Wizard']
Army 2: ['Wizard', 'Soldier', 'Archer']
Knight & Wizard
The wizard is victorious!

Army 1: ['Soldier', 'Wizard', 'Knight']
Army 2: ['Wizard', 'Soldier', 'Archer']
Soldier & Wizard
The wizard is victorious!

Army 1: ['Wizard', 'Knight', 'Soldier']
Army 2: ['Wizard', 'Soldier', 'Archer']
Wizard & Wizard
It's a tie!
```

Above is the automated duelling that occurs, and the user can only see once it is complete. You can see where a medic may have been used to revive a unit, sending that unit to the end of the list.

Rashid Elhawli
ID: 25421220

```
Army 1:  []  
Army 2:  ['Archer']  
ELHAWLI (Army 2) IS VICTORIOUS!  
  
Remaining units of Army 2:  ['Archer']  
  
Thank you for playing. If you really liked our simulator, you can always start again.  
  
Process finished with exit code 0
```

Once the medics are finished and the simulator has processed all the duels till one of the armies has no more units left, the output above is the result, much like the basic game.

That's about it.